## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 1 September 2005 (01.09.2005)

**PCT** 

## (10) International Publication Number WO 2005/080372 A1

- (51) International Patent Classification<sup>7</sup>: C07D 401/06, 211/76, A61K 31/4422
- (21) International Application Number:

PCT/EP2005/001192

- (22) International Filing Date: 5 February 2005 (05.02.2005)
- (25) Filing Language:

**English** 

(26) Publication Language:

English

(30) Priority Data: 04003741.8

19 February 2004 (19.02.2004) EP

- (71) Applicant (for all designated States except US): BAYER HEALTHCARE AG [DE/DE]; 51368 Leverkusen (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GIELEN-HAER-TWIG, Heike [DE/DE]; Claire-Waldoff-Str. 23, 40789 Monheim (DE). ALBRECHT, Barbara [DE/DE]; Heidestr. 9, 42289 Wülfrath (DE). BAUSER, Marcus [DE/DE]; Claudiusweg 3, 42115 Wuppertal (DE). KELDENICH, Jörg [DE/DE]; Damaschkeweg 49, 42113 Wuppertal (DE). LI, Volkhart [DE/DE]; Im Wiesengrund 40, 42553 Velbert (DE). PERNERSTORFER, Josef [AT/DE]; Gerresheimer Str. 9, 40721 Hilden (DE). SCHLEMMER, Karl-Heinz [DE/DE]; Wildsteig 22 a, 42113 Wuppertal (DE). TELAN, Leila [US/DE]; Rabenweg 42, 42115 Wuppertal (DE).

- (74) Common Representative: BAYER HEALTHCARE AG; Law and Patents, Patents and Licensing, 51368 Leverkusen (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DIHYDROPYRIDINONE DERIVATIVES

(57) Abstract: The invention relates to novel dihydropyridinone derivatives, processes for their preparation, and their use in medicaments, especially for the treatment of chronic obstructive pulmonary diseases, acute coronary syndrome, acute myocardial infarction and heart failure development.